## 510(k) Summary

K 020511

510(k) Submission Information:

Device Manufacturer:

Dade Behring Inc.

Contact name:

Maureen Mende, Group Manager Regulatory Affairs

Fax:

916-374-3144

Date prepared:

February 13, 2002

Product Name:

Microdilution Minimum Inhibitory Concentration (MIC) Panels MicroScan® rapID/S plus™ Gram-Negative MIC/Combo panels

Trade Name:

Intended Use:

To determine antimicrobial agent susceptibility

510(k) Notification: Predicate device:

Antimicrobials: Piperacillin/Tazobactam MicroScan Dried Gram Negative MIC/Combo Panels

510(k) Summary:

MicroScan® rapID/S plus™ Gram-Negative MIC/Combo Panels are designed for use in determining quantitative and/or qualitative antimicrobial agent susceptibility of colonies grown on solid media of rapidly growing aerobic and facultative anaerobic gram-negative bacilli. The MicroScan® rapID/S plus™ Gram-Negative MIC/Combo Panels are read on the WalkAway® SI System or equivalent (upgraded WalkAway® 40 or WalkAway® 96 instruments).

The antimicrobial susceptibility tests are miniaturizations of the broth dilution susceptibility test that have been diluted in Mueller-Hinton Broth to concentrations bridging the range of clinical interest and are presented in micro-titer wells in dried form. rapID/S plus™ panels are inoculated and rehydrated with a standardized suspension of the organism and incubated at 35°C in the WalkAway® SI System or equivalent for 4.5 - 18 hours. The minimum inhibitory concentration (MIC) for the test organism is determined by the lowest antimicrobial concentration showing inhibition of growth.

The proposed MicroScan® rapID/S plus™ Gram-Negative MIC/Combo Panel demonstrated substantially equivalent performance when compared with an NCCLS frozen Reference Panel, as defined in the FDA DRAFT document "Guidance on Review Criteria for Assessment of Antimicrobial Susceptibility Devices", dated March 8, 2000. The Premarket Notification (510[k]) presents data in support of the MicroScan® rapID/S plus™ Gram-Negative MIC/Combo Panel with Piperacillin/Tazobactam.

The external evaluation was conducted with fresh and stock Efficacy isolates and stock Challenge strains. The external evaluations were designed to confirm the acceptability of the proposed rapID/S plus Gram-Negative Panel by comparing its performance with an NCCLS frozen Reference panel. Challenge strains were compared to Frozen Results determined prior to the evaluation. The rapID/S plus™ Gram-Negative Panel demonstrated acceptable performance with an overall Essential Agreement of greater than 94 % for Piperacillin/Tazobactam when compared with the frozen Reference panel.

Instrument reproducibility testing demonstrated acceptable reproducibility and precision with Piperacillin/Tazobactam with Turbidity inoculum preparation method and the WalkAway® SI System or equivalent (upgraded WalkAway® 40 or WalkAway® 96 instruments).

Quality Control testing demonstrated acceptable results for Piperacillin/Tazobactam.



## **DEPARTMENT OF HEALTH & HUMAN SERVICES**

Food and Drug Administration 2098 Gaither Road Rockville MD 20850

Ms. Maureen Mende Group Manager Regulatory Affairs Dade Behring Inc. 2040 Enterprise Boulevard West Sacramento, CA 95691

Re: k020511

Trade/Device Name: MicroScan® RapID/S plus™ Gram-Negative MIC/Combo Panels

with Piperacillin/Tazobactam (1/4,4/4-256/4  $\mu$ g/ml)

6 2002

Regulation Number: 21 CFR 866.1645

Regulation Name: Fully Automated Short-Term Incubation Cycle Antimicrobial

MAR

Susceptibility Devices

Regulatory Class: Class II

Product Code: LON

Dated: February 13, 2002 Received: February 15, 2002

Dear Ms. Mende:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4588. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its internet address "http://www.fda.gov/cdrh/dsma/dsmamain.html".

Sincerely yours,

Steven I. Gutman, M.D., M.B.A.

Director

Division of Clinical Laboratory Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

**Enclosure** 

## INDICATIONS FOR USE STATEMENT

| Page <u>1</u> of <u>1</u> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 510(k) Number (if known): K <u>070511</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Device Name: <u>MicroScan<sup>®</sup> rapID/S plus<sup>™</sup> Gram-Negative MIC/Combo Panels with Piperacillin/Tazobactam (1/4, 4/4 – 256/4 μg/ml)</u>                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Indications For Use:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| The MicroScan <sup>®</sup> rapID/S plus <sup>™</sup> Gram-Negative MIC/Combo Panel is used to determine quantitative and/or qualitative antimicrobial agent susceptibility of colonies grown on solid media of rapidly growing aerobic and facultative anaerobic Gram-Negative bacilli (Enterobacteriaceae, glucose non-fermenters, and non-Enterobacteriaceae glucose fermenters. After inoculation, panels are read on the WalkAway <sup>®</sup> SI System or equivalent (upgraded WalkAway <sup>®</sup> 40 or WalkAway <sup>®</sup> 96) according to the Package Insert. |
| This particular submission is for the antimicrobial Piperacillin/Tazobactam on the rapID/S plus™ Gram-Negative MIC/Combo Panels.                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| The Gram-Negative organisms which may be used for Piperacillin/Tazobactam susceptibility testing in this panel are:                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Escherichia coli (Piperacillin-resistant, β-lactamase producing) Klebsiella oxytoca Klebsiella pneumoniae Morganella morganii Proteus mirabilis Proteus vulgaris Pseudomonas aeruginosa Serratia spp.                                                                                                                                                                                                                                                                                                                                                                       |
| The MicroScan <sup>®</sup> rapID/S plus <sup>™</sup> Gram-Negative with Piperacillin/Tazobactam is not intended for use with:                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Acinetobacter spp. Citrobacter spp. Enterobacter spp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| (PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Concurrence of CDRH, Office of Device Evaluation (ODE)  Prescription Use \( \frac{1}{2} \)  (Per 21 CFR 801.109)  OR  (Optional Format 1-2-96)  (Optional Format 1-2-96)  (Oivision Sign-Off)  Division of Clinical Laboratory Devices  piperacillin Tazobactam 510k rev1.doc.  7  5:510(k) Number                                                                                                                                                                                                                                                                          |
| piperacillin Tazobactam 510k rev1.doc. 7 5: 510(k) Number K 0.26577                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |